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<b>(21) International Application Number:</b> PCT/GB98/03397 <b>(22) International Filing Date:</b> 12 November 1998 (12.11.98)  <b>(30) Priority Data:</b> 9723945.3 12 November 1997 (12.11.97) GB  <b>(71) Applicant (for all designated States except US):</b> NATIONAL ENVIRONMENTAL RESEARCH COUNCIL [GB/GB]; Polaris House, North Star Avenue, Swindon SN2 1EU (GB).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> PAESEN, Guido, Christian [BE/GB]; 12 Mansfield Road, Oxford OX1 3TA (GB). NUTTALL Patricia, Ann [GB/GB]; 1 Manor Farm, Cullham, Oxon OX14 4NP (GB).  <b>(74) Agent:</b> MERCER, Christopher, Paul; Carpmaels & Ransford, 43 Bloomsbury Square, London WC1A 2RA (GB).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>
<b>(54) Title:</b> TISSUE CEMENT PROTEINS FROM RHIPICEPHALUS APPENDICULATUS  <b>(57) Abstract</b>  The present invention relates to tissue cement proteins produced by certain species of blood-feeding ectoparasites. These proteins and compositions comprising these proteins are particularly useful for the temporary or permanent bonding of animal tissues to each other or to other biomaterials. The present invention also relates to the use of tissue cement proteins in the production of vaccines that protect animals against the bite of blood-sucking ectoparasites and the transmission of viruses, bacteria and other pathogens by such ectoparasites.		